

Amendments to the Specification:

Please add the following heading and paragraph on page 1, after the title and before the first heading:

- Cross-Reference to Related Applications

This application is a divisional application of U.S. Patent Application Serial Number 10/211,886 filed on August 1, 2002, which is a continuation-in-part of U.S. Patent Application Serial number 09/929,542 filed on August 13, 2001, which is a divisional of U.S. Patent Application Serial Number 09/231,928 filed on January 14, 1999 which was issued on August 28, 2001 as US Patent No. 6,282,145, the subject matter of each of these applications is incorporated herein by reference. —

On page 61, replace paragraph 0226 with the following paragraph:

[0226] The memory [cell] system 2800 comprises a plurality of memory arrays 2801 arranged in rows and columns of memory arrays 2801. Each memory array 2801 comprises a plurality of memory subarrays 2802, a plurality of local sense amplifiers 2804, and a plurality of global sense amplifiers 2806. In one embodiment, a local sense amplifier 2804 is disposed adjacent to a memory subarray 2802. In another embodiment, the local sense amplifier 2804 is shared between a plurality of memory subarrays 2802. The local sense amplifier 2804 reads the contents of the memory cells with the corresponding memory subarray 2802. The memory subarrays 2802 are arranged in rows and columns. The local sense amplifiers 2804 coupled to a column of memory subarrays 2802 are coupled to a global sense amplifier 2806. The memory cells may include redundant cells, reference cells or spare cells.

On page 66, replace paragraph 0245 with the following paragraph:

[0245] The global sense amplifier 3174 comprises a comparator 3173, a PMOS transistor [3174] 3176 and a selection circuit 3178, which are arranged in similar manner as the comparator 3112, the PMOS transistor 3102 and the selection circuit 3158 of the global sense amplifier 3154, except the comparator 3173 is configured as a buffer. The comparator 3173 serves as a comparator in sensing the reference cells and serves as a buffer for driving the reference level.

On page 68, replace paragraph 0256 with the following paragraph:

[0256] Each local sense amplifier 3352 is coupled to a memory subarray 3150. In one embodiment, the local sense amplifier 3352 is disposed adjacent the memory subarray 3150. The local sense amplifier 3352 includes a selection circuit 3253 that couples a selected bitline 3151 to a bitline 3355. In one embodiment, the selection circuit 3253 comprises [transistor..] transistors. The local sense amplifier 3252 senses the selected memory cell on the bitline 3151 and provides a voltage to a global sense amplifier 3254.